

# 3810 Fibre Channel Switch

## An Affordable Solution for Small SANs

### Overview

The QLogic 3810 Fibre Channel Switch offers a simple and affordable way to share the capacity of Fibre Channel storage devices among multiple servers. Maximize the value of your redundant array of independent disk (RAID) and tape library investments with simultaneous, direct server connections through a state-of-the-art SAN.



## Highlights

### Features

- Eight ports
- 8Gbps speed (100-percent non-blocking)
- Backward-compatible with 4Gb and 2Gb devices
- 1U rack-mountable unit

### Easy to Deploy and Use

- Configuration wizards for fast setup
- QuickTools<sup>SM</sup> on-board GUI
- CLI

- I/O StreamGuard<sup>TM</sup>—guaranteed stability for tape, video, and other streaming applications
- N\_Port ID virtualization (NPIV) support for virtualized environments
- Advanced fabric security included
- Drag-and-drop zoning

### Hassle-Free Interoperability

- Deploy with 8Gb, 4Gb, or 2Gb optics
- Compatible with all leading adapters and storage

## Why Install a SAN?

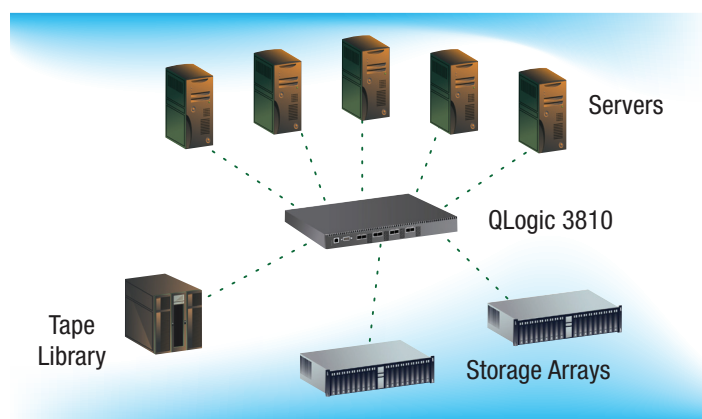
- Share storage resources among servers
- Reduce hardware and management costs
- Improve application performance and availability
- Accelerate server backups and disaster recovery
- Increase storage capacity

## Connect your first SAN with today's most advanced technology.

Link up to eight devices in a single-switch configuration with quick installation wizards and an easy-to-use, on-board, management user interface. Perfect for high-speed server backup or departmental SAN islands, the QLogic 3810 Switch helps busy IT managers centralize storage control and reduce infrastructure costs, all while improving data access.

Cost-conscious companies no longer need to sacrifice strategic IT goals to meet budgetary goals. With the 3810 Switch, standard features, such as I/O StreamGuard and NPIV, provide all the enterprise-class performance that QLogic's larger customers depend on—at a price that can produce an immediate return on investment even for the smallest businesses.

Best of all, QLogic's 8Gb Fibre Channel technology ensures that this reliable, entry-level switch will continue to meet the most demanding requirements far into the future, while maintaining full backward compatibility with 4Gb and 2Gb devices. Increase the long-term impact of your mission-critical storage infrastructure with today's best SAN-switch value.



**Experience the cost-saving benefits of shared storage: maximize return on RAID/tape investments; scale storage independent of servers; centralize access management**

For information about supported SAN standards and classes of service, refer to the *QLogic 3810 Fibre Channel Switch Installation Guide* that is available through the Downloads page at [www.qlogic.com](http://www.qlogic.com).

## Fabric Specifications

### Ports per Chassis

- Eight 8Gb SFP ports

### Port Types

- All ports are universal, auto-discovering, and self-configuring, assuming the following states: F\_Port, FL\_Port, G\_Port, GL\_Port (E\_Ports not included—single-switch environments only)

## Performance Features

### Fabric Port Speeds

- 2/4/8Gbps, full-duplex
- All ports auto-negotiate with slower devices
- Fabric latency: less than 0.2μs
- Cut-through routing

### Fabric Point-to-Point Bandwidth (8-port switch)

- 1,700MBps, full-duplex

### Aggregate Bandwidth (8-port switch)

- 136Gbps per chassis, end-to-end
- Non-blocking architecture

### Maximum Frame Sizes

- 2,148 bytes (2,112 byte payload)

### Per-Port Buffering

- ASIC-embedded memory (non-shared)

## Media

### Supported SFP Types

- Hot-pluggable, industry-standard, 3.3V SFP+ (8Gb) transceivers
- Compatible with 4Gb and 2Gb SFPs
- Shortwave/longwave (optical), active copper

### Media Transmission Ranges (2Gbps)

- Shortwave optical: 500m (1,640ft)
- Longwave optical: 10km (6.2mi)

### Cable Types

- 50/62.5 micron multimode fiber optic
- 9 micron single-mode fiber optic

## Fabric Management

### Management Methods

- QuickTools Web applet (embedded in switch)
- CLI
- API, GS-4 management server (including FDMI), SNMP, remote authentication dial in-user service (RADIUS), FTP, TFTP, SMI-S
- Interoperability with leading SAN management applications

### Security

- User security: user accounts, RADIUS authentication
- Connection security: SSH (CLI), SSL (Enterprise Fabric Suite™ and SMI-S)
- Device security: FC-SP DH-CHAP, FC-GS-4 CT authentication

### Access Methods

- 10/100 Ethernet base-T (RJ45), serial port (RS-232 with DB9), IPv6 support

### Diagnostics

- Power-on self test (POST)

### Fabric Services

- NPIV support
- Simple name server
- Hardware-based zoning
- Registered state change notification (RSCN)
- I/O StreamGuard
- Automatic path selection
- FDMI support

### User Interface

- LEDs, command-line console, Web utilities

## Mechanical

- Optional rack-mount kit
- Front-to-back air pattern
- RoHS-compliant
- Dimensions H × W × D: 43.2 × 432 × 476mm (1.7 × 17 × 18.75in)
- Weight: 6.35kg (14lbs)

## Environmental and Equipment Specifications

### Operating

- Temperature: 0°–40°C
- Humidity (rH): 15%–80% 24-hour soak; non-conditional, 5%–90%, 8-hour ramp
- Altitude: 0–10,000 feet
- Vibration: 5–500Hz, random, 0.21g rms, 10 minutes
- Shock: 4g, 11ms, 20 repetitions

### Non-Operating

- Temperature: -40°–70°C
- Humidity: 5%–90% non-condensing
- Altitude: 0–50,000 feet
- Vibration: 5–500Hz, random, 2.09g rms, 10 minutes
- Shock: 30g, 13ms, trapezoidal

### Electrical

- Voltage: 100–240VAC; 50–60Hz
- Power load: 1A at 120VAC; 0.5A at 240VAC
- Power consumption: 60W nominal, 70W typical maximum

## Agency Approvals—Product Safety

- US and Canada: UL/cUL, 60950-1
- Europe: EN60950, CB Scheme-IEC 60950-1, CE, TUV, Low Voltage Directive
- Russia: GOST R
- Demko

## Agency Approvals—EMI/EMC

- Meets class A emissions and immunity requirements for USA, Canada, Europe, Australia, New Zealand, Korea, Japan



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